

Spark Gap

Vol. 27, Issues 11, Oct.- Nov. 2010 *MARC - Serving Central Indiana Communities for twenty-Six Years*



Following the October meeting several club members set up a mobile field operation outside the Johnson county jail using new RACES radio equipment. Club VP Dave Daily-KB9LOT explained how the multi-band Buddy Pole is pieced together for a low level field antenna. Next came the coax and battery power supplied by Steve-K9DY. Our new RACES Yaesu 857D HF radio was attached and remote contacts began streaming in. Bob Jones-KC9NJM made the first contact with a station in Ohio.

All this new equipment comes as part of a statewide RACES radio upgrade. Last year the Indiana Department of Homeland Security received a \$250-thousand dollar grant to equip all ninety-two counties and their RACES programs with a basic level of VHF/UHF and HF capabilities.

Johnson County RACES is the primary backup for Marion and was granted the Buddy Pole and a second Yaesu HF radio for mobile operations. The EOC radio room already has two HF rigs plus VHF/UHF and 220 MHz equipment.

All club members are encouraged to become proficient in the use of this equipment in case of disaster. Contact any of the club officers for more information.

-w8ish

GOBLIN PATROL



HALLOWEEN 2010

The annual Goblin Patrol was conducted by MARC in support of the Johnson County Sheriff's Department. There were nineteen mobile and base stations that participated in the event. Brenda KC9EBL was net control located at the Johnson County Emergency Management Agency EOC Radio Room. The Goblin Patrol is a service where amateur radio stations patrol certain county roads, overpasses and school locations to report any vandalism or suspicious activity. If a station reports any suspicious activity to the net control station the Sheriff's Department is notified and a Deputy is dispatched to that area. The amateur radio station does not approach the suspicious vehicle or activity at any time that is for the law enforcement officer to respond to the situation.

All seemed to go well and no activity was reported during the four hours the net was active. We would like to thank all the stations that participated that evening. MARC was also able to have the Goblin Patrol count toward the Simulated Emergency Test (S.E.T.) for this year that is now required by ARES.

I want to thank all participating stations to all for a job well done.
..... Bob-N9SIU

HILLTOP 2010 — A Rewarding Experience —

On August 28, 2010 several Mid-State club members participated in the 2010 Hilltopper OTA Event sponsored by the Indianapolis Radio Club. Jack W8ISH, Steve N9LC, and Steve K9DY operated from the Beanblossom Hill overlook in Brown County for the day. The objective of the event is to go portable from a hilltop and contact as many other hilltop stations as possible on the designated frequency bands of 75, 6 and 2 meters, using SSB and FM modes. One point was awarded for each band and mode. Operation was from 8 a.m. to 2 p.m. local time. The hilltop station with the most points accumulated from contacting other hilltops would be the winner. A tie-breaker would be total contacts including non-hilltop stations, if needed.

We met at a restaurant in Trafalgar at 7 a.m. to formulate our strategy, and eat a good breakfast, then it was on to Beanblossom hill. Steve (N9LC), set up his 75 meter bazooka antenna and powered his rig from his truck battery. Jack assembled a 2 meter yagi on an aluminum push up pole and ran his radio from batteries. Steve (K9DY) operated 6 meters using a moxon (modified 2 element beam) at 31 feet on a fiberglass pole, and also used battery power. We were all on the air around 8:30 a.m. and making contacts. Before noon, we had worked all the hills that we heard, on both modes. The only registered Hilltop that eluded us was in Shelby county. One other hilltop worked them, but no one else heard them. We found out later they had difficulties were only on the air for a short time. In the afternoon we decided to crank out as many contacts as possible, mostly on 75 meters as we had worked everyone we could find on 6 and 2 meters. The last hour, Jack concentrated on 75 meter SSB and made many contacts in Ohio, where they were having their own QSO party. It was a nice day on the hilltop, with sunny weather and a cool breeze, and it was a great time getting back to nature and terrorizing the wildlife with RF. Jack kept racking up the points as Steve and Steve began taking down antennas.

At the October 8, 2010 meeting of the Indianapolis Radio Club, Beanblossom Hill was declared the multi-op winner for 2010, with maximum hilltop contacts (20), and the most overall contacts (70), within the operating period. K9DY accepted the award on behalf of the team.

Steve - K9DY



WORK ON THE OLD HAM SHACK

They call it a mid-life make over. Take one weathered ham shack, remove the birds nest, bee hives and accumulated dirt and you have a fine looking home for a local repeater link. Over the course of two weeks a small cadre of busy hams cleaned up, vacuumed, painted and completed an exterior repeater shack make over.

Under the direction of Jack-W8ISH our technical committee volunteers made a clean sweep of bees' nests, wasps' nests, birds' nests and other age old dirt. The objective was to clean out the former repeater shack to give our repeater trustee, Jay-AA9YP, a nice place to install the Franklin Link radios.

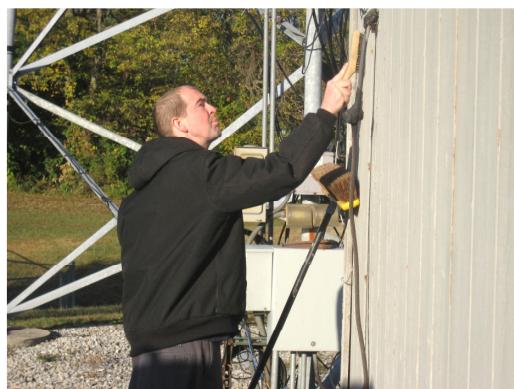
Upon closer inspection the crew found a need for new paint and replacement of old weathered building trim. Club President Steve Carmean-K9DY along with Rusty Kirts-N9LLP and Phil Norcross-N9JEP attacked the building and removed all the old trim, nails and useless hardware. Three trips to the hardware store for supplies gave us enough insulation, caulking, nails, paint and wood trim to finish the job. The building is painted a light battle ship gray to fit in with the nearby jail house motif. Light blue trim was added to match the club sign and give the building a nice lived in look. One sheriff deputy said we should add a flower box under the club sign.

The repeater shack held our club equipment at the base of the sheriff communications tower for nearly ten years. During that time our antenna and shack got moved to the short tower behind the jail. A new lock set has been installed so all club officers have access to the shack. The building will be open for tours following the November meeting.

-w8ish



Jack W8ISH uses his painting skills.



Phil N9JEP gets it ready for paint.



Our Hazmat Unit, Steve K9DY & Rusty N9LLP



Project completed.



GREENWOOD HIGH SCHOOL MARCHING BAND

Greenwood Marching Band Invitational

You could not ask for a nicer day with the sunny sky and cool weather on Saturday September 25th at the Greenwood high School. We had eight stations amateur stations help with this event. There were fifteen bands in the competition this year and we provided assistance with parking cars, busses and safety to the public. This year was also different than in years past due to it being held during daylight hours. This all worked well for everyone in attendance. All that helped did a great service to the public and were able to show amateur radio serving the public.

I would like to thank the following amateurs that helped with this event: Linda KC9GCH, Bob KC9NJM, Jack W8ISH, Brenda KC9EBL, Rusty N9LLP, Myron KC9ODW and Jim KC9ODS. I thank you all for the dedicated work you do for the community.

73, Bob N9SIU

2010 SCHEDULE OF EVENTS

NOVEMBER 2010

6 Indianapolis Monumental Marathon

Contact Mike Palmer (N9FEB) at www.indyhams.org for more information or to volunteer.

13-14 Ft. Wayne Hamfest; Allen County War Memorial Coliseum Exposition Center, Ft. Wayne, IN

20 MARC Meeting - 8:00 AM, Franklin, IN

Located at the Johnson County Emergency Management Agency, 1111 Hospital Road, Franklin, IN. VEC Testing after the meeting (approx. 9:30 am to 11:00 am)

25 Thanksgiving Day

27 Evansville Hamfest; Vanderburgh Co. 4-H Center, Evansville, IN

DECEMBER 2010

18 MARC Meeting - 8:00 AM, Franklin, IN

Located at the Johnson County Emergency Management Agency, 1111 Hospital Road, Franklin, IN. VEC Testing after the meeting (approx. 9:30 am to 11:00 am)

25 Christmas Day

The Doctor Is IN: Pacemakers and RF

Schley Cox, W4AMW, of Owensboro, Kentucky, told the Doctor that he's headed to see the cardiologist next week about a pacemaker. He's already started researching their use around RF and says he is happy to go all low power (QRP), if that's what's called for. Schley mentioned that he might also be able to operate his rig remotely -- perhaps 20 feet away, but he needs to know how to measure stray RF in the shack itself.

Here's what the Doctor had to say:



I haven't received actual reports of any pacemaker problems and that seems to go along with the [info on the ARRL Web site](#). Note that there are no power levels (or field strength) limits noted there, nor have I found any on manufacturers' Web sites. Thus knowing the actual field strength level in the station may not help. If it were me, I would start by talking to my physician. She won't be able to give you power limits, but perhaps could indicate symptoms to watch for while on the air so you could take appropriate action quickly if called for.

I would start with a careful RF safety evaluation, as required by the FCC anyway. While the FCC guidelines were not based on pacemaker interference, they should result in a reasonably safe environment. If your station is properly set up -- without common

mode feed line current, for example -- most radiation should surround the antenna and there should not be much RF within the shack.

Calibrated RF field strength meters are available, but are quite expensive. Relative measurement is pretty easy -- look at any recent *ARRL Handbook*. If you had a simple field strength meter running at all times in the station (I'm thinking the diode and microampmeter type that doesn't require power), you could see if anything changed, and diagnose and repair as needed.

Thanks Doctor! Do you have a question or a problem? Send your questions via [e-mail](#) or to "The Doctor," ARRL, 225 Main St, Newington, CT 06111 (no phone calls, please). Look for "The Doctor Is IN" every month in [QST](#), the official journal of the ARRL.

(ARRL Nov. 11th, 2010 "ARRL Newsletter")

MID-STATE AMATEUR RADIO CLUB

The Mid-State Amateur Radio Club meets the THIRD SATURDAY of each month in the basement of the Johnson County Emergency Management Agency, 1111 Hospital Road, Franklin, Indiana 46131.

See our website, www.midstatehams.org, for maps on how to get to our meeting.

WA9RDF

Repeater

146.835/

146.235 MHz

151.4 Hz PL

Tone

Weekly Net Sunday Evening 7:00 PM

Club Officers:

President: Steve Carmean - K9DY

Vice President: Dave Daily - KB9LOT

Secretary: Robert Jones - KC9NJM

Treasurer: Jacki Frederick - KI6QOG

Repeater Trustee: Jay Chrismon - AA9YP